

10/643,339

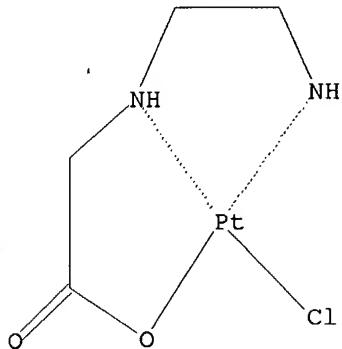
(FILE 'HOME' ENTERED AT 15:33:17 ON 11 OCT 2004)

FILE 'REGISTRY' ENTERED AT 15:33:30 ON 11 OCT 2004
L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 15:34:08 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 4 TO 200
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s 11 full
FULL SEARCH INITIATED 15:34:14 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 123 TO ITERATE

100.0% PROCESSED 123 ITERATIONS 15 ANSWERS
SEARCH TIME: 00.00.01

L3 15 SEA SSS FUL L1

=> fil caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 155.42 155.63

FILE 'CAPLUS' ENTERED AT 15:34:20 ON 11 OCT 2004
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FILE COVERS 1907 - 11 Oct 2004 VOL 141 ISS 16
FILE LAST UPDATED: 10 Oct 2004 (20041010/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13
L4 8 L3
=> d 1-8 bib abs

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:29664 CAPLUS
DN 136:256268
TI Oxidation of [PtIIICl₂(ethane-1,2-diamine-N,N'-dicarboxylic acid)] and ligand ring closure in the platinum(IV) oxidation state
AU Wong, Pong Nai; Davies, Murray S.; Hambley, Trevor W.
CS Centre for Heavy Metals Research, School of Chemistry, University of Sydney, Sydney, 2006, Australia
SO Australian Journal of Chemistry (2001), 54(5), 303-306
CODEN: AJCHAS; ISSN: 0004-9425
PB CSIRO Publishing
DT Journal
LA English
OS CASREACT 136:256268
AB Oxidation of the dichloroplatinum(II) complex of the potentially tetradentate ligand ethane-1,2-diamine-N,N'-diacetic acid (H₂enda) gives rise to a variety of products. A number of these species were crystallog. characterized. [PtIVCl₂(enda)] as the hemihydrate crystallizes in the monoclinic space group P21/a, with a 11.238(1), b 15.665(2), c 13.737(2), β 109.44(1) $^\circ$, and was refined to an R value of 0.030 on 3015F. [PtIVCl₂(enda)] as the monohydrate crystallizes in the orthorhombic space group Pna21, with a 6.984(2), b 9.000(3), c 18.431(3) , and was refined to an R value of 0.025 on 992F. [PtIVCl₃(Henda)]H₂O crystallizes in the orthorhombic space group Pbca, with a 11.741(1), b 12.851(2), c 17.133(2) Å, and was refined to an R value of 0.029 on 2015F. The major product is the ring-closed complex [PtIVCl₂(enda)] and if the solution is heated under reflux for 24 h, this is the only product. In contrast, reaction of cis,trans-[PtIVCl₂(OH)₂(ethane-1,2-diamine)] with excess HOAc was shown not to lead to displacement of the hydroxo ligands.

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:94956 CAPLUS
DN 134:347561
TI Synthesis and antitumour activity of platinum(II) and platinum(IV) complexes containing ethylenediamine-derived ligands having alcohol, carboxylic acid and acetate substituents. Crystal and molecular structure of [PtL4Cl₂]·H₂O where L4 is ethylenediamine-N,N'-diacetate
AU Jolley, J. N.; Yanovsky, A. I.; Kelland, L. R.; Nolan, K. B.
CS Department of Chemistry, Royal College of Surgeons in Ireland, Dublin,

Ire.

SO Journal of Inorganic Biochemistry (2001), 83(2-3), 91-100
CODEN: JIBIDJ; ISSN: 0162-0134

PB Elsevier Science Inc.

DT Journal

LA English

AB Several cisplatin analogs of ethylenediamine-derived ligands containing alc., carboxylic acid and acetate substituents were prepared and characterized. Oxidation of some of these square planar platinum(II) complexes using aqueous hydrogen peroxide gave octahedral platinum(IV) complexes, containing trans hydroxo ligands. Acetylation of the hydroxo ligands was achieved by reaction with acetic anhydride, giving complexes which are analogs of the antitumor drug, JM-216. Oxidation of [Pt(H₂L₄)Cl₂], where H₂L₄ is ethylenediamine-N,N'-diacetic acid, with H₂O₂ gave the platinum(IV) complex [PtL₄Cl₂]·H₂O in which L₄ is tetradentate as shown by a crystal and mol. structure. This complex was previously reported to be [Pt(HL₄)(OH)Cl₂] in which HL₄ is tridentate. Several of the complexes were tested for antitumor activity against five human ovarian carcinoma cell lines. IC₅₀ values range from 4.0 μM for cis,trans-PtCl₂(OH)₂(NH₂CH₂CH₂NHCH₂CH₂OH) against the CH₁ cell line to >25 μM indicating moderate to low activity relative to other platinum complexes.

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:186675 CAPLUS
DN 124:330624

TI A comparison of the solution behavior of Pt(II) complexes of N,N'- and N,N-ethylenediaminediacetate (edda and uedda)

AU Shepherd, Rex E.; Zhang, Songsheng; Kortes, Richard; Lin, Fu-Tyan;
Maricondi, Chris

CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260,
USA

SO Inorganica Chimica Acta (1996), 244(1), 15-23
CODEN: ICHAA3; ISSN: 0020-1693

PB Elsevier
DT Journal
LA English

AB Pt(II) complexes of N,N'-ethylenediaminediacetate (edda) and N,N-ethylenediaminediacetate (uedda) were prepared from K₂PtCl₄ by stepwise addition of the N backbone donors at pH .apprx.2.9 (50-60°, 60 h) and further coordination of the deprotonated carboxylate donors at pH ≥4 (65-75°, 24 h). Coordination of the glycinate donors was shown by ¹H and ¹³C NMR and IR methods. The sym. edda ligands form 38.3% (R,R)/(S,S)-[Pt(edda)] isomers and 61.7% meso (R,S)/(S,R)-[Pt(edda)] isomers. All four forms of [Pt(edda)] undergo aquation of one in-plane glycinate donor in 72 h as detected by the appearance of a 13-line ¹H NMR pattern which may be deconvoluted into four AB glycinate sets. These results are indicative of a pendant or ion-paired glycinate donor for [Pt(edda)(H₂O)] which is placed either on the same side, or the opposite side, of the PtN₂O₂ plane and coordinated glycinate donor. ¹⁹⁵Pt NMR shows that H₂O is actually replaced by Cl⁻, i.e. [Pt(edda)Cl]⁻. The unsym. [Pt^{II}(uedda)X] (X = H₂O, Cl⁻, OH⁻) complex exhibits no major change over long time intervals (≥10 days, pD .apprx.6). The presence of a minor species at 15% abundance may be a similarly structured species as for [Pt(edda)(H₂O)] with a pendant glycinate functionality. The major complex in solution is shown by the ¹H NMR with [NaCl] and [NaClO₄]-dependence studies to be [Pt(uedda)(H₂O)] at low [Cl⁻] and [Pt(uedda)Cl]⁻ at 1.0M Cl⁻. ¹⁹⁵Pt NMR confirms the formulation of X = H₂O at low [Cl⁻]. ¹H and ¹³C NMR evidence supports one axially associated and one in-plane coordinated glycinate donor each for the major [Pt(uedda)(H₂O)] complex. The ¹³C NMR shows only one type of glycinate donor with a chemical

shift of 189.3 ppm for the major species, and two types for the 15% species (185.6 and 170.5 ppm). The major species of [Pt(uedda)(H₂O)] has only one type of carboxylate stretch in the IR spectra (1661 cm⁻¹; shoulder feature at 1639 cm⁻¹) which compares favorably with the fully-coordinated pair of glycinate donors of [Pt(edda)] (1640 cm⁻¹). Probably the structures of [Pt(uedda)(H₂O)] and [Pt(uedda)Cl]⁻ are pseudo-square pyramids which illustrates the capacity of Pt(II) to adopt five-coordinate, 18-electron complexes when a suitable chelate ligand offers a fifth associable donor. These species are similar to the five-coordinate intermediates of ligand substitution reactions of typical square-planar Pt(II) complexes.

L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:503239 CAPLUS
DN 97:103239
TI Study of reactions of inner-sphere substitution by complexons in platinum compounds
AU Yushkova, S. V.
CS Fac. Chem., Moscow State Univ., Moscow, USSR
SO Deposited Doc. (1981), VINITI 3167-81, 70-1 Avail.: VINITI
DT Report
LA Russian
AB Pt(II) and Pt(IV) complexes react with N,N'-ethylenediaminediacetic acid (H₂L) to give Pt(NH₃)L, Pt(NH₃)₂(OH)2L·3H₂O, KHPtCl₄L, and KHPtCl₂(OH)2L. KHPtCl₄L and KHPtCl₂(OH)2L react with HCl to give H₂PtCl₄L and H₂PtCl₂(OH)2L, resp. The aging of an aqueous solution of KHPtCl₂(OH)2L for several h gave KPt(OH)Cl₂L. In Pt(NH₃)L and KPt(OH)Cl₂L, the ligand is tridentate, whereas in the other complexes it is bidentate. The complexes were characterized by thermal anal. and their stability consts. were determined

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:45253 CAPLUS
DN 96:45253
TI Synthesis and study of some platinum ethylenediaminediacetates
AU Zheligovskaya, N. N.; Ansari, S. V.
CS Mosk. Gos. Univ., Moscow, USSR
SO Koordinatsionnaya Khimiya (1981), 7(10), 1540-3
CODEN: KOKHDC; ISSN: 0132-344X
DT Journal
LA Russian
AB Pt(NH₃)₂Z (H₂Z = ethylenediaminediacetic acid) was prepared by reaction of Pt(NH₃)₂Cl₂ with H₂Z in aqueous solution Pt(NH₃)₂(OH)2Z·3H₂O, KHPtCl₄Z, KHPtCl₂(OH)2Z, H₂PtCl₄Z, H₂PtCl₂(OH)2Z, and KPt(OH)Cl₂Z were prepared similarly. In Pt(NH₃)₂Z and KPt(OH)Cl₂Z, the ligand Z²⁻ is tridentate whereas in the other complexes it is bidentate. Protonation consts. were determined for some Pt complexes.

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1977:429894 CAPLUS
DN 87:29894
TI Study of the acid properties of palladium(II) and platinum(II) ethylenediaminediacetates
AU Grevtsev, A. M.; Zheligovskaya, N. N.; Popov, L. V.
CS Mosk. Gos. Univ., Moscow, USSR
SO Vestnik Moskovskogo Universiteta, Seriya 2: Khimiya (1977), 18(1), 116-18
CODEN: VMUKA5; ISSN: 0579-9384
DT Journal
LA Russian
AB The acid dissociation consts. (pK_{A1}, pK_{A2}) of H₂PdLC₁₂ and H₂PtLC₁₂ (H₂L = ethylenediamine-N,N'-diacetate) at 25° are 2.39, 3.22 and 2.54, 3.33, resp. Cs₂PdLC₁₂, H₂PdLC₁₂, and H₂PtLC₁₂ were isolated. The complexes lose Cl⁻ by hydrolysis and pCl values for H₂PdLC₁₂ and H₂PtLC₁₂

are 2.28 and 2.39, resp.

L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1967:426144 CAPLUS
DN 67:26144
TI Anchimeric assistance in the reactions of dichloro(ethylenediamine-N,N'-diacetic acid) platinum(II) and its conjugate base
AU Tanner, Stephen P.; Basolo, Fred; Pearson, Ralph G.
CS Northwestern Univ., Evanston, IL, USA
SO Inorganic Chemistry (1967), 6(6), 1089-91
CODEN: INOCAJ; ISSN: 0020-1669
DT Journal
LA English
AB The rate of elimination of Cl⁻ from dichloro(ethylenediamine-N,N'-diacetic acid)platinum(II) [Pt(H2EDDA)Cl₂] is considerably increased when the free acid groups are neutralized. In acid solution the stable product is chloro(ethylenediamine-N,N'-acetic acid acetato)platinum(II) [Pt(HEDDA)Cl], whereas in solns. of higher pH the diacetato complex [Pt(EDDA)] is formed. The kinetics of the Cl⁻ elimination reactions have been investigated and the pH dependence of the reaction rate has been explained in terms of the reactions of the acid and base forms of the complex. The reactions of dichloro(N,N'-dimethylethylenediamine)platinum(II) [Pt(Me₂en)Cl₂] in acetate ion solution have been studied and the results compared with the results of the chloride substitution in the above complexes to show the importance of the neighboring group effect.

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1964:80611 CAPLUS
DN 60:80611
OREF 60:14106c-d
TI Complexes of ethylenediamine-N,N'-diacetic acid and platinum.
cis-Oxidation
AU Liu, Chui Fan
CS Univ. of Michigan, Ann Arbor
SO Inorg. Chem. (1964), 3(5), 680-4
DT Journal
LA Unavailable
AB The ligand formed bidentate and tetradeinate complexes with Pt(II). With Pt(IV), tridentate and tetradeinate complexes were obtained. Oxidns. of the Pt(II) complexes to form the dichloro-(ethylenediamine-N,N'-diacetato)platinum(IV) were carried out. The regular type of addition reaction could be performed to yield the trans-dichloro isomer. The cis-dichloro isomer could also be obtained either by a ring closure reaction or by direct oxidation with the hexachloroplatinate(IV) ion.

(FILE 'HOME' ENTERED AT 15:40:26 ON 11 OCT 2004)

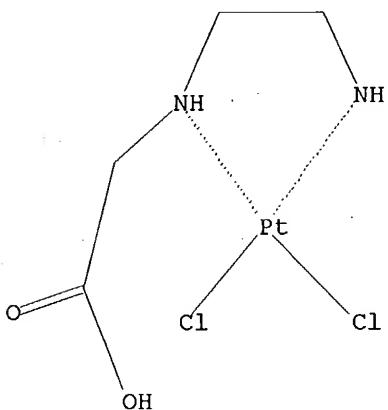
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L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation:

=> s 11

SAMPLE SEARCH INITIATED 15:41:02 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 2 TO 124

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s 11 full

FULL SEARCH INITIATED 15:41:09 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 97 TO ITERATE

100.0% PROCESSED 97 ITERATIONS 22 ANSWERS
SEARCH TIME: 00.00.01

L3 22 SEA SSS FUL L1

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY

SESSION

155.42

155.63

FILE 'REGISTRY' ENTERED AT 15:41:15 ON 11 OCT 2004

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DICTIONARY FILE UPDATES: 10 OCT 2004 HIGHEST RN 760149-23-3

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<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> s 13
SAMPLE SEARCH INITIATED 15:41:19 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2 TO 124
PROJECTED ANSWERS: 1 TO 80

L4 1 SEA SSS SAM L1

=> fil caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
0.42 156.05

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FILE COVERS 1907 - 11 Oct 2004 VOL 141 ISS 16
FILE LAST UPDATED: 10 Oct 2004 (20041010/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13
L5 19 L3

=> d 1-19 bib abs

L5 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:162472 CAPLUS
DN 140:193045
TI Dynamic platinum compounds for the treatment of cancer
IN Shaw, Jiajiu
PA USA
SO U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004039051	A1	20040226	US 2003-643339	20030819
PRAI US 2002-405325P	P	20020822		
OS MARPAT 140:193045				

AB This invention discloses a series of dynamic platinum compds. and method of treating cancer by administering said compound to a cancer patient.

L5 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:665391 CAPLUS
DN 139:210687
TI Analysis of the growth system of Candida albicans in a host and the development of new antifungal material
AU Watanabe, Toshihiko
CS Department of Microbiology, Tohoku Pharmaceutical University, Aoba-ku, Sendai, 981-8558, Japan
SO Yakugaku Zasshi (2003), 123(7), 561-567
CODEN: YKKZAJ; ISSN: 0031-6903
PB Pharmaceutical Society of Japan
DT Journal
LA Japanese
AB Hyphal cells of Candida albicans bind to human Hb, but not yeast cells. The amount of Hb receptor is significantly higher in hyphal cells than on yeast cells. Only the hyphal cells of C. albicans use Hb as a source of iron. The culture supernatant of C. albicans promoted the disruption of human red blood cells (RBC). Hemolytic activity was detected in a sugar-rich fraction (about 200 kDa) purified by Sephadryl S-100 chromatog. As the hemolytic activity was adsorbed by Con A (Con A)-Sepharose, the hemolytic factor might be a mannoprotein. The activity was inactivated by periodate oxidation, indicating that the sugar moiety of the mannoprotein plays an important role in hemolysis. The structure of the sugar moiety of the mannoprotein was identified as a cell wall mannan by ¹H-NMR anal., and purified C. albicans mannan promoted the disruption of RBC. The binding of mannan to RBC was demonstrated by flow cytometric anal. and was inhibited by the addition of the band 3 protein inhibitor, 4,4'-diisothiocyanato-stilbene-2,2'-disulfonic acid (DIDS). The hemolysis caused by mannan is inhibited by DIDS, 4-acetamido-4'-isothiocyanato-stilbene-2,2'-disulfonic acid, and bis(sulfosuccinimidyl) suberate, but not by pyridoxal-5'-phosphate. A new platinum derivative of the form H[Pt(IV)(Hdigly)Cl₂(OH)₂] (Hdigly = glycylglycine) has candidacidal activity 10-fold lower than that of cisplatin.

L5 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:29664 CAPLUS
DN 136:256268
TI Oxidation of [PtIIICl₂(ethane-1,2-diamine-N,N'-dicarboxylic acid)] and ligand ring closure in the platinum(IV) oxidation state
AU Wong, Pong Nai; Davies, Murray S.; Hambley, Trevor W.

CS Centre for Heavy Metals Research, School of Chemistry, University of Sydney, Sydney, 2006, Australia
SO Australian Journal of Chemistry (2001), 54(5), 303-306
CODEN: AJCHAS; ISSN: 0004-9425
PB CSIRO Publishing
DT Journal
LA English
OS CASREACT 136:256268
AB Oxidation of the dichloroplatinum(II) complex of the potentially tetradentate ligand ethane-1,2-diamine-N,N'-diacetic acid (H₂enda) gives rise to a variety of products. A number of these species were crystallographically characterized. [PtIVCl₂(enda)] as the hemihydrate crystallizes in the monoclinic space group P21/a, with a 11.238(1), b 15.665(2), c 13.737(2), β 109.44(1)°, and was refined to an R value of 0.030 on 3015F. [PtIVCl₂(enda)] as the monohydrate crystallizes in the orthorhombic space group Pna21, with a 6.984(2), b 9.000(3), c 18.431(3), and was refined to an R value of 0.025 on 992F. [PtIVCl₃(Henda)]H₂O crystallizes in the orthorhombic space group Pbca, with a 11.741(1), b 12.851(2), c 17.133(2) Å, and was refined to an R value of 0.029 on 2015F. The major product is the ring-closed complex [PtIVCl₂(enda)] and if the solution is heated under reflux for 24 h, this is the only product. In contrast, reaction of cis,trans-[PtIVCl₂(OH)₂(ethane-1,2-diamine)] with excess HOAc was shown not to lead to displacement of the hydroxo ligands.

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:94956 CAPLUS
DN 134:347561
TI Synthesis and antitumour activity of platinum(II) and platinum(IV) complexes containing ethylenediamine-derived ligands having alcohol, carboxylic acid and acetate substituents. Crystal and molecular structure of [PtL₄Cl₂]·H₂O where L₄ is ethylenediamine-N,N'-diacetate
AU Jolley, J. N.; Yanovsky, A. I.; Kelland, L. R.; Nolan, K. B.
CS Department of Chemistry, Royal College of Surgeons in Ireland, Dublin, Ire.
SO Journal of Inorganic Biochemistry (2001), 83(2-3), 91-100 15 JANUARY 2001
CODEN: JIBIDJ; ISSN: 0162-0134
PB Elsevier Science Inc.
DT Journal
LA English
AB Several cisplatin analogs of ethylenediamine-derived ligands containing alc., carboxylic acid and acetate substituents were prepared and characterized. Oxidation of some of these square planar platinum(II) complexes using aqueous hydrogen peroxide gave octahedral platinum(IV) complexes, containing trans hydroxo ligands. Acetylation of the hydroxo ligands was achieved by reaction with acetic anhydride, giving complexes which are analogs of the antitumor drug, JM-216. Oxidation of [Pt(H₂L₄)Cl₂], where H₂L₄ is ethylenediamine-N,N'-diacetic acid, with H₂O₂ gave the platinum(IV) complex [PtL₄Cl₂]·H₂O in which L₄ is tetradentate as shown by a crystal and mol. structure. This complex was previously reported to be [Pt(HL₄)(OH)Cl₂] in which HL₄ is tridentate. Several of the complexes were tested for antitumor activity against five human ovarian carcinoma cell lines. IC₅₀ values range from 4.0 μM for cis,trans-PtCl₂(OH)₂(NH₂CH₂CH₂NHCH₂CH₂OH) against the CH1 cell line to >25 μM indicating moderate to low activity relative to other platinum complexes.

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:688969 CAPLUS
DN 134:209

TI Anti-Candida activity of a new platinum derivative
AU Watanabe, T.; Takano, M.; Ogasawara, A.; Mikami, T.; Kobayashi, T.;
Watabe, M.; Matsumoto, T.
CS Department of Microbiology, Tohoku Pharmaceutical University, Sendai,
981-8558, Japan
SO Antimicrobial Agents and Chemotherapy (2000), 44(10), 2853-2854
CODEN: AMACQ; ISSN: 0066-4804
PB American Society for Microbiology
DT Journal
LA English
AB A new platinum derivative of the form H[Pt(IV)(Hdigly)Cl₂(OH)₂] (Hdigly=glycylglycine) damaged the Candida albicans cell membrane and inhibited the growth of the cells. The cytotoxic activity of H[Pt(IV)(Hdigly)Cl₂(OH)₂] on mammalian cells was 10-fold lower than that of cis-diammine-dichloroplatinum (cisplatin). Substitution of platinum for peptides is effective for enhancement of antifungal activity and reduction of the toxicity to mammalian cells.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:227620 CAPLUS
DN 130:360522
TI Preparation, 195Pt NMR spectra and biological activity of platinum(IV) complexes with dipeptides
AU Watabe, Masatoshi; Kobayashi, Takao; Kawahashi, Takako; Hino, Ayako; Watanabe, Toshihiko; Mikami, Takeshi; Matsumoto, Tatsuji; Suzuki, Masuko
CS General Education Department, Kogakuin University, Tokyo, 192-0015, Japan
SO Journal of Inorganic Biochemistry (1999), 73(1,2), 1-5
CODEN: JIBIDJ; ISSN: 0162-0134
PB Elsevier Science Inc.
DT Journal
LA English
AB Three dipeptide complexes K[Pt(IV)(dipep)Cl(OH)₂] and four dipeptide complexes K[Pt(IV)(Hdipep)Cl₂(OH)₂] were newly prepared. The 195Pt NMR peaks of the K[Pt(IV)(dipep)Cl(OH)₂] complexes appeared at .apprx.1200 ppm and these chemical shifts were .apprx.3150 ppm downfield compared with those of the K[Pt(II)(dipep)Cl] complexes. The chemical shifts of the K[Pt(IV)(Hdipep)Cl₂(OH)₂] complexes were at .apprx.900 ppm, i.e., .apprx.3050 ppm downfield compared with those of the K[Pt(II)(Hdipep)Cl] complexes. The H[Pt(IV)(Hdigly)Cl₂(OH)₂] and K[Pt(IV)(Hdigly)Cl₂(OH)₂] complexes inhibited the growth of C. albicans at a more diluted concentration than cisplatin at 1 µg/mL, but the Pt complexes only weakly inhibited the growth of these cells compared with the cisplatin-inhibited growth of Meth-A and Hep-2 cells at 10 µg/mL. Probably the Pt complexes selectively inhibited the growth of fungal cells.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:691132 CAPLUS
DN 128:28812
TI Crystal structure of dichloro(ethylenediaminediacetic acid-N,N')platinum(II)
AU Mullaney, Matthew; Chang, Shih-Chi; Norman, Richard E.
CS Department of Chemistry and Biochemistry, Duquesne University, Pittsburgh, PA, 15282, USA
SO Inorganica Chimica Acta (1997), 265(1-2), 275-278
CODEN: ICCHA3; ISSN: 0020-1693
PB Elsevier
DT Journal

LA English
AB Crystals of (PtC6H12N2O4Cl2, mol. weight = 442.17) are pale yellow plates. The compound is orthorhombic, space group Pccm, with a $a = 7.9289(7)$, $b = 3.723(3)$, $c = 19.604(5)$ Å and $Z = 2$. The structure was refined to $R = 0.071$ and $R_w = 0.070$ for 627 reflections with $I > 3.00\sigma$ (I). Atomic coordinates are given. The Pt atom sits on the intersection of a mirror plane and 2-fold axis. The ligand atoms are disordered and are present with 1/2 occupancy. The Pt center is roughly square planar as expected, coordinated by a total of two N and two Cl atoms.

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:186675 CAPLUS
DN 124:330624
TI A comparison of the solution behavior of Pt(II) complexes of N,N'- and N,N-ethylenediaminediacetate (edda and uedda)
AU Shepherd, Rex E.; Zhang, Songsheng; Kortes, Richard; Lin, Fu-Tyan;
Maricondi, Chris
CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260,
USA
SO Inorganica Chimica Acta (1996), 244(1), 15-23
CODEN: ICHAA3; ISSN: 0020-1693
PB Elsevier
DT Journal
LA English
AB Pt(II) complexes of N,N'-ethylenediaminediacetate (edda) and N,N-ethylenediaminediacetate (uedda) were prepared from K2PtCl4 by stepwise addition of the N backbone donors at pH .apprx.2.9 (50-60°, 60 h) and further coordination of the deprotonated carboxylate donors at pH ≥4 (65-75°, 24 h). Coordination of the glycinato donors was shown by ^1H and ^{13}C NMR and IR methods. The sym. edda ligands form 38.3% (R,R)/(S,S)-[Pt(edda)] isomers and 61.7% meso (R,S)/(S,R)-[Pt(edda)] isomers. All four forms of [Pt(edda)] undergo aquation of one in-plane glycinato donor in 72 h as detected by the appearance of a 13-line ^1H NMR pattern which may be deconvoluted into four AB glycinato sets. These results are indicative of a pendant or ion-paired glycinato donor for [Pt(edda)(H2O)] which is placed either on the same side, or the opposite side, of the PtN₂O₂ plane and coordinated glycinato donor. ^{195}Pt NMR shows that H2O is actually replaced by Cl-, i.e. [Pt(edda)Cl]⁻. The unsym. [Pt^{II}(uedda)X] (X = H2O, Cl-, OH-) complex exhibits no major change over long time intervals (≥10 days, pD .apprx.6). The presence of a minor species at 15% abundance may be a similarly structured species as for [Pt(edda)(H2O)] with a pendant glycinato functionality. The major complex in solution is shown by the ^1H NMR with [NaCl] and [NaClO₄]-dependence studies to be [Pt(uedda)(H2O)] at low [Cl-] and [Pt(uedda)Cl]⁻ at 1.0M Cl-. ^{195}Pt NMR confirms the formulation of X = H2O at low [Cl-]. ^1H and ^{13}C NMR evidence supports one axially associated and one in-plane coordinated glycinato donor each for the major [Pt(uedda)(H2O)] complex. The ^{13}C NMR shows only one type of glycinato donor with a chemical shift of 189.3 ppm for the major species, and two types for the 15% species (185.6 and 170.5 ppm). The major species of [Pt(uedda)(H2O)] has only one type of carboxylate stretch in the IR spectra (1661 cm⁻¹; shoulder feature at 1639 cm⁻¹) which compares favorably with the fully-coordinated pair of glycinato donors of [Pt(edda)] (1640 cm⁻¹). Probably the structures of [Pt(uedda)(H2O)] and [Pt(uedda)Cl]⁻ are pseudo-square pyramids which illustrates the capacity of Pt(II) to adopt five-coordinate, 18-electron complexes when a suitable chelate ligand offers a fifth associative donor. These species are similar to the five-coordinate intermediates of ligand substitution reactions of typical square-planar Pt(II) complexes.

L5 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:181666 CAPLUS
DN 120:181666
TI Thermal stability of platinum ethylenediaminediacetates
AU Al Ansari, S. V.
CS Marii. Gos. Univ., Russia
SO Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya
Tekhnologiya (1993), 36(9), 54-8
CODEN: IVUKAR; ISSN: 0579-2991
DT Journal
LA Russian
AB The thermal stability of [PtL(NH₃)] (H₂L = N,N'-ethylenediaminediacetic acid), [PtL(NH₃)₂(OH)₂].3H₂O, K[Pt(HL)Cl₂(OH)₂] and K[Pt(HL)Cl₄] was studied by DTA, TGA, IR spectra and paper chromatog. The strength of Pt-N and Pt-O bonds in these complexes was determined. These complexes begin to decompose at 200-220° with decarboxylation and subsequently deamination.

L5 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:113942 CAPLUS
DN 100:113942
TI Synthesis and study of acid properties of platinum(II) and palladium(II) dichloride ethylenediamine-N,N'-diacetates and dichloride aminoethylimino-N,N-diacetates
AU Zheligovskaya, N. N.; Shchelokova, L. R.; Popov, L. V.; Spitsyn, V. I.
CS Mosk. Gos. Univ., Moscow, USSR
SO Koordinatsionnaya Khimiya (1984), 10(1), 107-10
CODEN: KOKHDC; ISSN: 0132-344X
DT Journal
LA Russian
AB H₂MLC₁₂ (M = Pd, Pt; H₂L = ethylenediamine-N,N'-diacetic acid) and H₂ML1C₁₂.2H₂O (H₂L₁ = aminoethylimino-N,N-diacetic acid) were prepared. The acid dissociation consts. for H₂MLC₁₂ and H₂ML1C₁₂.2H₂O were determined. Both complexes are totally protonated at pH < 1 and totally deprotonated at pH > 6; at pH 1-6 both protonated and deprotonated species exist. Both ligands are bidentate and N-coordinated, forming 4-coordinate complexes.

L5 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:522210 CAPLUS
DN 99:122210
TI Hydrogen-deuterium exchange of heterocyclic compounds on catalysts of different nature
AU Dedov, A. G.; Filippova, T. Yu.; Neimerovets, E. B.; Popov, L. V.; Stepanova, I. P.; Karakhanov, E. A.
CS Mosk. Gos. Univ., Moscow, 117234, USSR
SO Khimiya Geterotsiklicheskikh Soedinenii (1983), (7), 912-16
CODEN: KGSSAQ; ISSN: 0453-8234
DT Journal
LA Russian
AB The deuteration of benzofuran by D₂O occurred with Pt complex catalysts and with Pt black obtained from these complexes. The most active complex was K tetrachloroplatinite, and Pt black obtained from this complex was more active than Pt black obtained from the other complexes examined. Deuteration by C₆D₆ or C₂D₅OD was less efficient or did not occur. 1,4-Benzodioxane was deuterated less readily than benzofuran. Active C, NdNaX zeolite, Al₂O₃, and aluminosilicate failed to catalyze the reaction. K₂PtCl₄ catalyzed the deuteration of 3-methylbenzothiophene without being poisoned.

L5 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:503239 CAPLUS
DN 97:103239

TI Study of reactions of inner-sphere substitution by complexons in platinum compounds
AU Yushkova, S. V.
CS Fac. Chem., Moscow State Univ., Moscow, USSR
SO Deposited Doc. (1981), VINITI 3167-81, 70-1 Avail.: VINITI
DT Report
LA Russian
AB Pt(II) and Pt(IV) complexes react with N,N'-ethylenediaminediacetic acid (H₂L) to give Pt(NH₃)L, Pt(NH₃)₂(OH)₂L·3H₂O, KHPtCl₄L, and KH₂PtCl₂(OH)₂L. KHPtCl₄L and KH₂PtCl₂(OH)₂L react with HCl to give H₂PtCl₄L and H₂PtCl₂(OH)₂L, resp. The aging of an aqueous solution of KH₂PtCl₂(OH)₂L for several h gave KPt(OH)Cl₂L. In Pt(NH₃)L and KPt(OH)Cl₂L, the ligand is tridentate, whereas in the other complexes it is bidentate. The complexes were characterized by thermal anal. and their stability consts. were determined

L5 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:45253 CAPLUS
DN 96:45253
TI Synthesis and study of some platinum ethylenediaminediacetates
AU Zheligovskaya, N. N.; Ansari, S. V.
CS Mosk. Gos. Univ., Moscow, USSR
SO Koordinatsionnaya Khimiya (1981), 7(10), 1540-3
CODEN: KOKHDC; ISSN: 0132-344X
DT Journal
LA Russian
AB Pt(NH₃)₂Z (H₂Z = ethylenediaminediacetic acid) was prepared by reaction of Pt(NH₃)₂Cl₂ with H₂Z in aqueous solution. Pt(NH₃)₂(OH)₂Z·3H₂O, KHPtCl₄Z, KH₂PtCl₂(OH)₂Z, H₂PtCl₄Z, H₂PtCl₂(OH)₂Z, and KPt(OH)Cl₂Z were prepared similarly. In Pt(NH₃)₂Z and KPt(OH)Cl₂Z, the ligand Z²⁻ is tridentate whereas in the other complexes it is bidentate. Protonation consts. were determined for some Pt complexes.

L5 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1981:507700 CAPLUS
DN 95:107700
TI Synthesis and study of the properties of halogen-containing platinum(II) ethylenediamine-N,N'-diacetates
AU Zheligovskaya, N. N.; Grevtsev, A. M.; Shchelokova, L. R.; Tsivadze, A. Yu.; Spitsyn, V. I.
CS Mosk. Gos. Univ., Moscow, USSR
SO Zhurnal Neorganicheskoi Khimii (1981), 26(7), 1973-4
CODEN: ZNOKAQ; ISSN: 0044-457X
DT Journal
LA Russian
AB K₂PtX₄ (X = Cl, Br) react with ethylenediaminediacetic acid (H₂EDDA) in solution at pH < 5 to give H₂Pt(EDDA)X₂. The acid dissociation consts. pK₂ are 3.1 and 3.4 for the chloro and bromo complexes, resp. On the basis of IR data, a structure is proposed for H₂Pt(EDDA)X₂.

L5 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1978:586597 CAPLUS
DN 89:186597
TI Neighboring carboxylate group effects in reactions of metal complexes; chloride ion displacement from [2-(2-aminoethylamino)acetic acid-NN']dichloroplatinum(II) and its conjugate base in aqueous solution
AU Nolan, Kevin B.; Soudi, Ali Akbar
CS Dep. Chem., Univ. Surrey, Guildford, UK
SO Journal of Chemical Research, Synopses (1978), (4), 118
CODEN: JRPSDC; ISSN: 0308-2342
DT Journal
LA English
AB The kinetics of Cl⁻ displacement from the title complex, prepared from

H₂N(CH₂)₂NHCH₂CO₂H·2HCl and K₂[PtCl₄], and its conjugate base in aqueous solution

were studied between pH 1-7 at 298.2-349.2 K. The neighboring carboxylate group effects were studied, as Cl⁻ displacement occurred by ring closure. The conjugate base was more reactive because of an entropic advantage, overriding the enthalpic advantage of the acid. The thermodn. ionization constant of the title complex was also determined

L5 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1978:16014 CAPLUS
DN 88:16014
TI Preparation and antitumor evaluation of water-soluble derivatives of dichloro(1,2-diaminocyclohexane)platinum(II)
AU Schwartz, Paul; Meischen, Sandra J.; Gale, Glen R.; Atkins, Loretta M.; Smith, Alayne B.; Walker, Ernest M., Jr.
CS VA Hosp., Charleston, SC, USA
SO Cancer Treatment Reports (1977), 61(8), 1519-25
CODEN: CTRRDO; ISSN: 0361-5960
DT Journal
LA English
AB The structure of the antitumor agent NSC-194814 [dichloro(1,2-diaminocyclohexane)platinum(II)] [52691-24-4] was modified by replacing the chlorides with organic or inorg. anions. Eighteen new Pt complexes were so isolated and their antitumor properties against the L1210 leukemia in C57BL/6 + DBA/2 mice were evaluated. Most of the complexes were readily soluble in water and some had enhanced antitumor activity compared to the parent dichloro complex. In addition, increased solubility with retention of significant antitumor activity was obtained by oxidizing the parent dichloroplatinum(II) complex with halogen or peroxide to give 2 Pt(IV) complexes. Some previously reported Pt complexes with P, Se, or Te electron-donor ligands were also synthesized and assessed for antitumor action, but these did not show appreciable activity.

L5 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1970:26728 CAPLUS
DN 72:26728
TI Absorption spectra and circular dichroisms of metal complexes. IV. Dichloro-diamine type complexes of platinum(II) and Palladium(II)
AU Ito, Haruko; Fujita, Junnosuke; Saito, Kazuo
CS Tohoku Univ., Sendai, Japan
SO Bulletin of the Chemical Society of Japan (1969), 42(10), 2863-9
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
AB Absorption spectra of dichloro(1 - tetrahydrogenpropylenediaminetetraacetato)platinum-(II) and -palladium(II) and dichloro(d-hydrogendifaminopropionate)platinum(II) and -palladium(II) were interpreted on the basis of a comparison of their CD spectra with those of dichloro-(1-propylenediamine)platinum(II) and -palladium(II). The d-d bands of H₄EDTA and D-(-)D-propylenediaminetetraacetic acid complexes shifted to longer wavelength as compared with those of D-(-)D-propylenediamine complexes. The shift was discussed, based on the effects of the weaker ligand field strength and apical interaction of the acetato groups of these ligands.

L5 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1967:426144 CAPLUS
DN 67:26144
TI Anchimeric assistance in the reactions of dichloro(ethylenediamine-N,N'-diacetic acid) platinum(II) and its conjugate base
AU Tanner, Stephen P.; Basolo, Fred; Pearson, Ralph G.
CS Northwestern Univ., Evanston, IL, USA

SO Inorganic Chemistry (1967), 6(6), 1089-91
CODEN: INOCAJ; ISSN: 0020-1669
DT Journal
LA English
AB The rate of elimination of Cl⁻ from dichloro(ethylenediamine-N,N'-diacetic acid)platinum(II) [Pt(H₂EDDA)Cl₂] is considerably increased when the free acid groups are neutralized. In acid solution the stable product is chloro(ethylenediamine-N,N'-acetic acid acetato)platinum(II) [Pt(EDDA)Cl], whereas in solns. of higher pH the diacetato complex [Pt(EDDA)Cl] is formed. The kinetics of the Cl⁻ elimination reactions have been investigated and the pH dependence of the reaction rate has been explained in terms of the reactions of the acid and base forms of the complex. The reactions of dichloro(N,N'-dimethylethylenediamine)platinum(II) [Pt(Me₂en)Cl₂] in acetate ion solution have been studied and the results compared with the results of the chloride substitution in the above complexes to show the importance of the neighboring group effect.

L5 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1964:80611 CAPLUS
DN 60:80611
OREF 60:14106c-d
TI Complexes of ethylenediamine-N,N'-diacetic acid and platinum.
cis-Oxidation
AU Liu, Chui Fan
CS Univ. of Michigan, Ann Arbor
SO Inorg. Chem. (1964), 3(5), 680-4
DT Journal
LA Unavailable
AB The ligand formed bidentate and tetradeinate complexes with Pt(II). With Pt(IV), tridentate and tetradeinate complexes were obtained. Oxidns. of the Pt(II) complexes to form the dichloro-(ethylenediamine-N,N'-diacetato)platinum(IV) were carried out. The regular type of addition reaction could be performed to yield the trans-dichloro isomer. The cis-dichloro isomer could also be obtained either by a ring closure reaction or by direct oxidation with the hexachloroplatinate(IV) ion.